Cascade

SUMMIT200

200 mm Fully-automated Probe System

VIDEO

"The new SUMMIT200 advanced probing system enables up to 5X faster time to accurate data."

eVue™ IV Digital Imaging System
- Fast probe set-up with wide field-of-view and single objective in MicroChamber
- Easy navigation with multiple live video views of probes and wafer
- New high-speed focus system for faster and accurate die stepping
- New safety features for probes and usability

Versatile microcope mount
- High stability or large area
- Boom stand for low power optics
- Gross Z lift with repeatable focus for easy access to probes
- Manual or programmable
- Field-upgradable

Connection panels
- Coaxial, triaxial, and pin jack feed-troughs available
- Limit cable strain and motion for measurement stability
- Instrument stays connected to back of panel
- Probe connection made at front of panel
- Simple to re-arrange cabling when needed

Platen lift
- Easy and safe contact and separate function for probe cards and positioners
- Available micrometer adjustment to set probe card contact

TopHat™
- New TopHat covers for easier and higher-accuracy probe setup
- Allows full access to positioners and microscope at any temperature
- Allows probe adjustments without exposing wafer and chamber to external environment

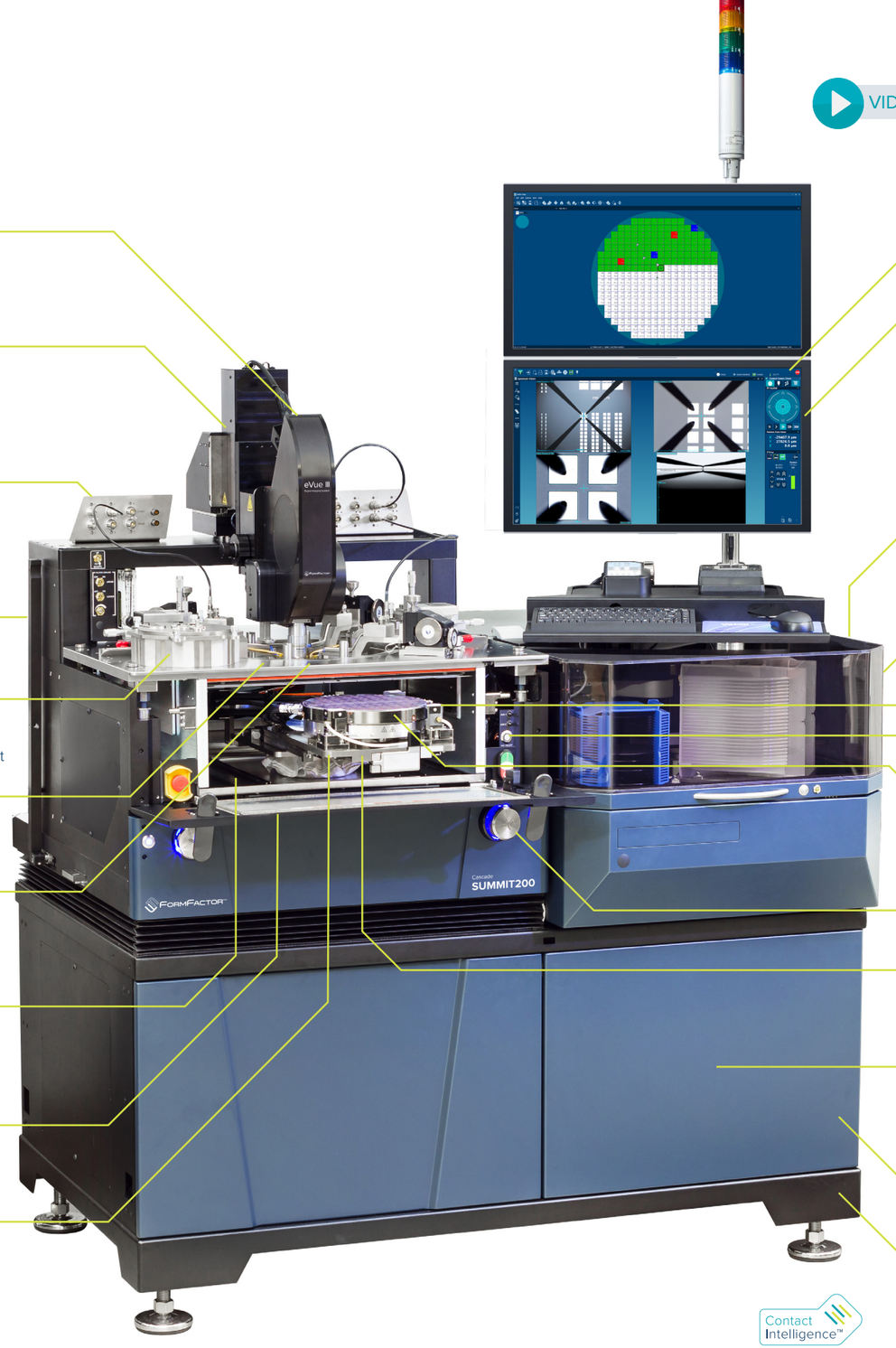
PureLine™ technology
- Enhanced EMI-shielding
- Lowest spectral noise floor and system AC noise
- Ideal for low-level and 1/f measurements

AttoGuard®
- Extends instrument guard to completely surround wafer
- Makes the station invisible to the instrument
- Extremely low capacitance and leakage characteristics
- Fast settling times

MicroChamber®
- EMI-shielding for low-noise measurements
- Environmentally sealed for moisture-free, low-temperature measurements
- Low volume for the fastest purge
- Light-tight to eliminate the need for a dark box

MicroChamber access door
- Auto-locking door to protect wafers at cold temperatures
- Full width for easy access to wafers and cal substrates
- Hardware interlock to protect user from hazardous chuck bias voltage

Rollout stage
- Full wafer access for safe and easy loading
- Maintains chuck integrity without contaminating layers
- Easy access to calibration substrates on auxiliary chucks
- New Lift pin technology for fast manual load/unload of hot wafers



Velox™ probe station control software
- Innovative operating software for advanced prober operation, temperature control, z-profiling and stepping
- Wafer mapping, automated wafer alignment, and auto XYZ and theta correction for sub-micron stepping

VeloxPro package (optional)
- SEMI E95-compliant probe station control software with condensed graphical user interface for simplified operation
- Test executive software enabling control of third-party measurement equipment via the probe station

Automated wafer handling
- Up to 50 wafers with optional 2nd cassette
- Quick access port for maximum throughput
- Save time with parallel ID reading and pipelining
- Fast load/unload wafer to hot/cold chuck (-60° C to +300° C)

Thin wafer testing
- Safe robot handling for thin/warped wafers down to 50 µm
- Advanced wafer handling for high-performance non-liftpins MicroVac chucks

Auxiliary chucks
- Up to 3 integrated multi-purpose mounts (calibration, cleaning, contact)
- New microwave absorber and material options (ceramic, steel)
- Thermally isolated to prevent load drift over temperature
- Automated probe cleaning capabilities

Chuck vacuum control
- Independent zones for various wafer sizes, dies and shards
- Easy access controls for auxiliary chucks

Modular chucks
- FemtoGuard® triaxial and coax versions available
- MicroVac™ option for thin wafer support and best thermal conductivity
- High-performance thermal and economical non-thermal options
- Wide range of temperature options from -60 °C to 300 °C and higher

Manual mode stage control
- Intuitive manual chuck XY stage controls in semi-automatic engineering mode

Precision 200 mm wafer stage
- New user-selectable performance modes for standard, fast and high accuracy
- Increased test throughput with up to 100 mm/sec. speed
- High reliability 24/7 operation

Contact Intelligence™ Technology
- Integrated HTS (High Thermal Stability) reduces probe drift and thermal soak time
- Optional ReAlign for SUMMIT200 with Near-On-Axis PTPA technology, enabling vertical probe cards on smallest footprint with highest thermal stability
- Optional VueTrack™ enables fast time to data even when measuring over a large thermal range
- Enables unattended test over multiple temperatures

Scalable system
- In-field upgradable wafer loading and automation
- Add test accuracy improvements for increased test performance

Compact small footprint
- Integrated vibration isolation for reliable small pad probing
- Integrated system electronics with power loss wafer safety protection

Contact Intelligence™